

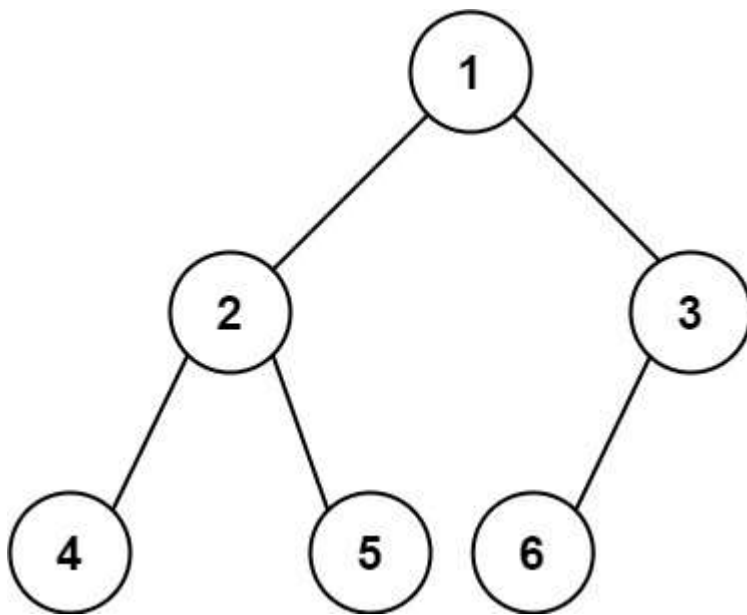
## Count Complete Tree Nodes [\(View\)](#)

Given the `root` of a **complete** binary tree, return the number of the nodes in the tree.

According to [Wikipedia](#), every level, except possibly the last, is completely filled in a complete binary tree, and all nodes in the last level are as far left as possible. It can have between  $1$  and  $2^h$  nodes inclusive at the last level  $h$ .

Design an algorithm that runs in less than  $O(n)$  time complexity.

### Example 1:



Input: `root = [1,2,3,4,5,6]`

Output: 6

### Example 2:

Input: `root = []`

Output: 0

### Example 3:

Input: `root = [1]`

Output: 1

**Constraints:**

- The number of nodes in the tree is in the range  $[0, 5 * 10^4]$ .
- $0 \leq \text{Node.val} \leq 5 * 10^4$
- The tree is guaranteed to be **complete**.